

a plurality of conductive contacts disposed on the housing and configured for coupling to the plurality of contact pads on the electrochemical sensor; and

an rf transmitter disposed in the housing and coupled to the plurality of conductive contacts for transmitting data obtained using the electrochemical sensor.

³³~~46~~. (Twice Amended) A sensor assembly, comprising:

a sensor comprising a flexible substrate with at least one working electrode, at least one counter electrode, and at least one contact pad coupled to each of the working and counter electrodes, the sensor being adapted for implantation of a portion of the sensor comprising the working and counter electrodes through skin; and

a sensor control unit comprising

a housing adapted for placement on skin;

a plurality of conductive contacts disposed on the housing and configured for coupling to the contact pads of the sensor; and

an rf transmitter disposed in the housing and coupled to the plurality of conductive contacts for transmitting data obtained using the sensor.

³⁹~~52~~. (Twice Amended) An analyte monitoring system comprising:

a sensor comprising at least one working electrode and at least one contact pad coupled to the at least one working electrode, the sensor being adapted for implantation of a portion of the sensor comprising the working electrode through skin;

the sensor control unit of claim 1; and

a display unit comprising an rf receiver for receiving data from the sensor control unit, and a display coupled to the rf receiver for displaying an indication of the level of an analyte.

⁸⁰~~121~~. (Amended) An analyte monitoring system comprising:

(a) a sensor comprising at least one working electrode and at least one contact pad coupled to the at least one working electrode, the sensor being adapted for implantation of a portion of the sensor comprising the working electrode through skin;

(b) a sensor control unit comprising,
 (i) a housing adapted for placement on skin and adapted to receive a portion of an electrochemical sensor having a plurality of contact pads;
 (ii) a plurality of conductive contacts disposed on the housing and configured for coupling to the plurality of contact pads on the electrochemical sensor; and
 (iii) an rf transmitter disposed in the housing and coupled to the plurality of conductive contacts for transmitting data obtained using the electrochemical sensor; and
(c) a display unit comprising a receiver for receiving data from the sensor control unit, and a display coupled to the receiver for displaying an indication of the level of an analyte, wherein the transmitter of the sensor control unit and the receiver of the display unit are capable of transmitting and receiving data when separated by a distance of two meters.

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89.

122. (Amended)

A sensor control unit comprising:

a housing adapted for placement on skin and adapted to receive a portion of an independent electrochemical sensor extending out of the skin and having at least one contact pad; at least one conductive contact configured for coupling to the at least one contact pad on the independent electrochemical sensor; and
an rf transmitter disposed in the housing and coupled to the at least one conductive contact for transmitting data obtained using the independent electrochemical sensor.

Remarks

This Amendment is submitted in response to the Office Action dated November 15, 1999. Claims 1, 46, 52, 121, and 122 have been amended and claim 22, 25, 32, 34-39, 41-44, and 93 have been canceled. Claims 1-21, 23, 24, 26-31, 33, 40, 45-92, and 113-127 are presently pending. The Applicants thank the Examiner for indicating that claims 34-39, 49-50, 58-61, 118-120, and 127 would be allowable if rewritten in independent form.